
INDEX

ASTROPHYSICS

Volume 13, Numbers 1-4, 1977



ASTROPHYSICS
Volume 13, Numbers 1-4, 1977

(A translation of Astrofizika)

A

Abramyan, M. G. - 134, 140
Adzhyan, G. S. - 168
Akopyan, A. V. - 423
Alodzhants, G. P. - 174
Antonov, V. A. - 145
Arakelyan, M. A. - 130,
241, 386
Arutyunyan, É. A. - 305
Avakyan, R. M. - 174

B

Bartaya, R. A. - 63
Borchkadze, T. M. - 358
Borngen, F. - 1, 125
Bugrii, A. I. - 195

C

Chalonge, D. - 247
Chavushyan, O. S. - 102,
105
Chernin, A. D. - 35, 145
Chubaryan, É. V. - 176

D

Dagkesamanskii, R. D. -
367
Danielyan, É. Kh. - 147
Danilov, V. M. - 406
Divan, L. - 247

E

Egikyan, A. G. - 125, 229
Eigenson, A. M. - 306
Elenskii, Ya. S. - 432
Erastova, L. K. - 105

F

Fomin, P. I. - 40

G

Gershberg, R. E. - 310
Gorbatskii, V. G. - 272

Grachev, S. I. - 95
Grigoryan, L. Sh. - 158,
260, 396
Grinin, V. P. - 348

H

Hagen-Thorn, V. A. - 337

I

Imshennik, V. S. - 54
Ivanov, L. N. - 416
Ivanov, V. V. - 284, 308

J

Kalloglyan, A. T. - 1,
125, 229
Kaplan, S. A. - 140, 154,
294
Kazaryan, M. A. - 234
Kazhdan, Ya. M. - 301
Khachikyan, É. E. - 234
Kharadze, E. K. - 63
Kleiman, E. B. - 291
Klimishin, I. A. - 54
Kogoshvili, N. G. - 379
Kolotilov, E. A. - 17,
253
Krol', V. A. - 40
Kulinich, V. V. - 294

L

Lipovetskii, V. A. - 116,
215
Lomadze, R. D. - 154
Lutskii, A. E. - 301
Lyubimkov, L. S. - 71

M

Markaryan, B. E. - 116,
215, 372
Melikyan, N. D. - 102,
105
Mirzoyan, L. V. - 105,
247, 333
Muradyan, R. M. - 32

N

Natsvlisvili, R. Sh. -
105
Nuritdinov, S. N. - 413

O

Oganesyan, R. S. - 134,
140
Oganyan, G. B. - 105, 333
Oiringel', I. M. - 291
Otroshchenko, I. V. - 54

P

Pavlov, G. G. - 89
Pikichyan, O. V. - 147
Polnarev, A. G. - 203
Pronik, V. I. - 26

R

Rudolph, R. - 78
Ruzmaikin, A. A. - 50,
186

S

Saakyan, G. S. - 158, 174,
260, 396
Sanamyan, V. A. - 305
Sarkisyan, A. V. - 176
Sedrakyan, D. M. - 78,
174
Sekerzhitskii, V. S. - 84,
265
Shakhabasyan, K. M. - 78
Shaposhnikov, V. E. - 209
Shchekinov, Yu. A. - 421
Shenavrin, V. I. - 253
Shul'man, G. A. - 84,
265, 389
Silich, S. A. - 40
Sobolev, V. V. - 348
Sokolov, D. D. - 50
Stepanyan, Dzh. A. - 116,
215, 372
Suvorov, A. L. - 432

T

Tovmasyan, G. M. - 67
 Trushevskii, A. A. - 195
 Tsvetanov, Z. I. - 11
 Tsvetkov, M. K. - 105
 Tsytovich, V. N. - 423

U

Usov, V. V. - 61

Vartanyan, Yu. L. - 168
 Vedmich, V. G. - 277
 Volodin, Yu. V. - 367
 Voshchinnikov, N. V. - 337

W

West, R. M. - 358

Y

Yakovlev, D. G. - 89
 Yankulova, I. M. - 11

Z

Zaitseva, G. V. - 253

TABLES OF CONTENTS

ASTROPHYSICS

Volume 13, Numbers 1-4, 1977

(A translation of *Astrofizika*)

Volume 13, Number 1

January-March, 1977

Engl./Russ.

Investigation of the Cluster of Galaxies ZW Cl 1710.4 + 6401 - F. Börngen and A. T. Kalloglyan.....	1	5
Optical Outbursts in the Seyfert Galaxy NGC 1275 - Z. I. Tsvetanov and I. M. Yankulova .	11	21
Spectral and Photometric Observations of Fast Irregular Variable Stars II. The Lines H $_{\alpha}$ and H $_{\beta}$ in the Spectra of WW Vul, VX Cas, and UX Ori - E. A. Kolotilov ...	17	33
Gas Envelopes of Nuclei of Seyfert Galaxies - V. I. Pronik.....	26	51
Cosmic Coincidences and Rotation of the Metagalaxy - R. M. Muradyan	32	63
On the Origin of Rotation of Galaxies. II - A. D. Chernin.....	35	69
Magnetogasdynamical Mechanism of Rotation of Galaxies with Spiral Structure - V. A. Krol', S. A. Silich, and P. I. Fomin.....	40	79
Inhomogeneous Large-Scale Magnetic Field and Global Structure of the Universe - A. A. Ruzmaikin and D. D. Sokolov.....	50	95
Motion of Thermal Waves in Polytropic Envelopes of Stars - V. S. Imshennik, I. A. Klimishin, and I. V. Otroshchenko	54	103
Influence of a Magnetic Field on the Pulsation Stability of Rapidly Rotating Supermassive Stars - V. V. Usov	61	117
Luminosity Function of Stars - R. A. Bartaya and E. K. Kharadze.....	63	123
On the Origin of Stellar Clusters - G. M. Tovmasyan.....	67	131
Variations in the Helium Abundance in Associations and Clusters of O and B Stars - L. S. Lyubimkov.....	71	139
Inertial Mechanism of Generation of Magnetic Fields in Pulsars - D. M. Sedrakyan, K. M. Shakhbasyan, and R. Rudolph	78	153
Lifting of the Degeneracy and the Ideal Gas Approximation for Electrons of a Cold Dense Star with Frozen Superstrong Magnetic Field - G. A. Shul'man and V. S. Sekerzhitskii.....	84	165
Radiative Heat Transfer in a Magnetic Field - G. G. Pavlov and D. G. Yakovlev	89	173
Characteristic Lengths in Problems of Radiative Transfer in a Moving Medium - S. I. Grachev.....	95	185
BRIEF COMMUNICATION		
Three-Color Observations of a Slow Flare in the Orion Region - O. S. Chavushyan and N. D. Melikyan.....	102	199

Volume 13, Number 2

April-June, 1977

Flare Stars in the Pleiades. V - L. V. Mirzoyan, O. S. Chavushyan, L. K. Erastova, G. B. Oganyan, N. D. Melikyan, R. Sh. Natsvlishvili, and M. K. Tsvetkov.....	105	205
Galaxies with Ultraviolet Continuum. X - B. E. Markaryan, V. A. Lipovetskii, and Dzh. A. Stepanyan	116	225
UBV Surface Photometry of Markaryan Galaxies 185 and 186 - F. Börngen, A. T. Kalloglyan, and A. G. Egikyan	125	233

Mean Surface Brightnesses and Radio Emission of Galaxies - M. A. Arakelyan.....	130	245
Interstellar Medium in Spheroidal Galaxies - M. G. Abramyan and R. S. Oganessian.....	134	253
Kinetic Theory of Differentially Rotating Interstellar Medium in Galaxies - S. A. Kaplan, R. S. Oganessian, and M. G. Abramyan	140	263
Hidden Mass and Dynamical Evolution of Stellar Systems - V. A. Antonov and A. D. Chernin..	145	271
Radiation Field in a Plane-Parallel Atmosphere Containing Energy Sources - É. Kh. Danielyan and O. V. Pikichyan	147	275
Broadening and Shift of Emission Lines during Nonlinear Transfer in a Turbulent Plasma - S. A. Kaplan and R. D. Lomadze	154	287
Pionization of Degenerate Matter - G. S. Saakyan and L. Sh. Grigoryan	158	295
Inhomogeneously Rotating Neutron Stars - G. S. Adzhyan and Yu. L. Vartanyan	168	313
On the Paper "Magnetosphere of Baryon Stars" - R. M. Avakyan, G. P. Alodzants, G. S. Saakyan, and D. M. Sedrakyan.....	174	323
Rotating Relativistic Polytropes - A. V. Sarkisyan and É. V. Chubaryan	176	327
Anisotropic Cosmological Solutions in the Theory of Gravitation with Quadratic Invariants - A. A. Ruzmaikin.....	186	345
Some Cosmological Consequences of the High-Temperature Hadron Phase Transition - A. I. Bugril and A. A. Trushevskii	195	361
Black Holes in the Quasi-Isotropic Tolman Solution - A. G. Polnarev	203	375
Polarization of Sources of Thermal Radiation - V. E. Shaposhnikov	209	385

Volume 13, Number 3

July-September, 1977

Galaxies with Ultraviolet Continuum. XI - B. E. Markaryan, V. A. Lipovetskii, and Dzh. A. Stepanyan.....	215	397
Luminosity Function of the Cluster of Galaxies A2634 - A. G. Egikyan and A. T. Kalloglyan.....	229	405
Spectral and Morphological Investigation of the Galaxy NGC 6306. I - M. A. Kazaryan and É. E. Khachikyan	234	415
Dependence of the Emission Line Intensities of Seyfert Galaxies on the Color Index - M. A. Arakelyan.....	241	427
Spectrophotometric Studies of Nonstable Stars. III. The Spectrum of FG Sagittae in 1968-1973 - D. Chalonge, L. Divan, and L. V. Mirzoyan	247	437
Spectral and Photometric Observations of Fast Irregular Variables. III. VX Cas, UX Ori, BN Ori, and WW Vul - Results of U, B, V, J, H, K, and L Photometry - E. A. Kolotilov, G. V. Zaitseva, and V. I. Shenavrin	253	449
Presence of π^- Mesons in Heavy Atomic Nuclei - L. Sh. Grigoryan and G. S. Saakyan	260	463
Stable State of Cold Magnetized Matter at Subnuclear Densities - V. S. Sekerzhitskii and G. A. Shul'man	265	473
Angular Velocity Distribution in a Star That Is a Component of a Close Binary and Has a Rapidly Rotating Core - V. G. Gorbatskii.....	272	485
Broadening of Spectral Lines by Electron Scattering. II. Pure Absorption in the Line - V. G. Vedmich	277	493
A Standard Problem of the Theory of Radiative Transport - V. V. Ivanov	284	505
Calculation of Population of the 2S Level of the Hydrogen Atom in a Plasma Medium - E. B. Kleiman and I. M. Oiringel'	291	517
Decrement Series of Radio Lines with Large Quantum Numbers - S. A. Kaplan and V. V. Kulinich.....	294	523
Self-similar Flow for Accretion with Spherical Symmetry and Allowance for a Pressure Gradient - Ya. M. Kazhdan and A. E. Lutsikii	301	535
BRIEF COMMUNICATIONS		
Distribution of Compact Groups in Compact Galaxies and Radio Sources - V. A. Sanamyan and É. A. Arutyunyan	305	543

Metallicity Function of Globular Clusters - A. M. Eigenson	306	545
BOOK REVIEW		
M. N. Ozisik. Radiative Transfer - Reviewed by V. V. Ivanov	308	549
REVIEW		
Flare Activity of UV Ceti - R. E. Gershberg	310	553

Volume 13, Number 4

October-December, 1977

Possible Cyclic Flare Activity of Flare Stars in the Pleiades - L. V. Mirzoyan and G. B. Oganyan	333	561
Polarimetric Investigation of the Nebula NGC 6618 and the Neighboring Stars - V. A. Hagen-Thorn and N. V. Voshchinnikov	337	569
Theory of Flare Stars - V. P. Grinin and V. V. Sobolev	348	587
New Peculiar and Interacting Galaxies with Emission in the Southern Sky - T. M. Borchkadze and R. M. West	358	605
Radio Emission of the Andromeda Nebula at 102.5 MHz - Yu. V. Volodin and R. D. Dagkesamanskii	367	617
On the Nature of Galaxies with Ultraviolet Continuum. III. Surface Brightness, Morphology, and Activity - B. E. Markaryan and Dzh. A. Stepanyan	372	627
Some Remarks Concerning the Diameters and Magnitudes of Galaxies Suspected of Being Compact - N. G. Kogoshvili	379	639
Distribution of the Mean Surface Brightnesses of Galaxies in the Coma Cluster - M. A. Arakelyan	386	651
Kinetics of Neutronization in Superdense Magnetized Matter - G. A. Shul'man	389	657
Superdense Degenerate Plasma - G. S. Saakyan and L. Sh. Grigoryan	396	669
Late Stages in the Evolution of Open Star Clusters - V. M. Danilov	406	685
Nonlinear Traveling Waves of Star Density in a Model of a Homogeneous Medium - S. N. Nuritdinov	413	697
Convection in a Periodic Gravitational Field. II - L. N. Ivanov	416	703
On the Origin of High-Velocity HI Clouds - Yu. A. Shchekinov	421	711
Bremsstrahlung Instability of Relativistic Electrons in a Plasma - A. V. Akopyan and V. N. Tsytoich	423	717
BRIEF COMMUNICATIONS		
Survival Mechanism for Relativistic Specks of Dust in the Cosmos - Ya. S. Elenskii and A. L. Suvorov	432	731
INDEX		
Author Index, Volume 13, Numbers 1-4, 1977	437	
Tables of Contents, Volume 13, Numbers 1-4, 1977	439	



